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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE


# TRANSMITTAL FORM

*(to be used for all correspondence after initial filing)*

| | |
|---|---|
| Application Number | 09/331,008 |
| Filing Date | 07/08, 1999 |
| First Named Inventor | Eriko Shimizu |
| Art Unit | 2615 |
| Examiner Name | Tia M Harris |
| Total Number of Pages in This Submission: 9 | Attorney Docket Number |

## ENCLOSURES *(Check all that apply)*

- ☐ Fee Transmittal Form
- ☐ Fee Attached
- ☒ Amendment/Reply (2 pages with 6 annex sheets)
- ☐ After Final
- ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/ Incomplete Application
- ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____
- ☐ After Allowance communication to Group
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to Group **(Appeal Notice, Brief, Reply Brief)**
- ☐ Proprietary Information
- ☐ Status Letter
- ☐ Other Enclosure(s) (please identify below):

Remarks

This is the transmission of corrected amendment document to the "Notice of Non-Compliant Amendment" (mailed 12/01/2003), that concerns to the previously submitted amendment filed on 8/04/2003.



## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

| | |
|---|---|
| Firm or Individual name | Eriko Shimizu |
| Signature | Eriko Shimizu |
| Date | December 23, 2003 |

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

| | | | |
|---|---|---|---|
| Typed or printed name | Eriko Shimizu | | |
| Signature | Eriko Shimizu | Date | December 23, 2003 |

1/7/04

INTRODUCTORY COMMENTS of Correction

This is the correction to the "Notice of Non-Compliant Amendments (Date mailed 12/01/2003)"

**1. Items to be corrected**

The applicant received the Notice (Date mailed 12/01/2003) that the following checked items cause the amendment document to be non-compliant.



☒ 4. Amendments to the claims:

☒ A.

☒ C.

☒ E. Other:

Claims 1-6 are not mentioned in complete listing of claims.

The abstract should be in narrative form, generally limited to a single paragraph on a separate sheet with 50～150 words.

**2. The correction of "Amendments to the claims"**

**Claims**

Claims are corrected as the attached "Corrected complete listing of claims" (claims sheet 1/2 and 2/2) sheets that correspond to the checked items 4-A, 4-C, and 4-E of the notice.

In this list, Claim 1 and claim 2 are canceled after amended to claim7 and claim11 as the new claim. Claims3-4 and claims5-6 are also canceled after amended to claims9-10 and claims12-13 as the new claims respectively. And claim 8 is newly settled relating to claim 1.

For reference, details of changed parts of claim7-13 are shown in attached "Details of claim amendments" (claims detail 1/2 and 2/2) sheets.

**Abstract**

If the amendment of abstract that corresponds to the checked item 4-E is also required to correct to become compliant and is possible to correct at this correction, the abstract is corrected as the attached "Corrected AMENDED ABSTRACT (clean version)" (abstract sheet 1/1) sheet.

And the details of the correction are shown in attached "Details of

corrected AMENDED ABSTRACT (marked up version)" (abstract detail 1/1) sheet, for reference.

December 23, 2003

Eriko Shimizu

Eriko Shimizu

Applicant/Inventor

## Corrected complete listing of claims

Claims 1-6 (canceled)

Claim 7 (new) ; An electronic zoom image input method that enables zooming without degrading the resolution, by including the fixed focus input image optical system having a function of compressing the input image more largely as it moves to the circumferential part, the image input device providing preferably uniform pixel density, and the zoom image converting and correcting system.

Claim 8 (new) ; An electronic zoom image input method that enables zooming without degrading the resolution, by including the fixed focus input image optical system having a function of compressing the circumferential part of the input image in logarithmic function, and the zoom image converting and correcting system.

Claim 9 (new) ; An electronic zoom image input method claimed in claim 7, that has the optical system where the compression of the circumferential part of the input image is limited to the vertical and horizontal direction.

Claim 10 (new) ; An electronic zoom image input method claimed in claim 7, that has a image input device with a rectangular input image plane, and an optical system with the function of compressing the circumferential part of the input image to all direction, and the neighboring part of the vertical and horizontal axes of the input image.

Claim 11 (new) ; An electronic zoom image input method claimed in Claim 7, or claim 8, or claim 9, or claim 10, where the optical system that compresses the circumferential part of the input image is included as the attachment optical system.

Claim 12 (new) ; An electronic zoom image input method claimed in claim 7, or claim 8, or claim 9, or claim 10, that is capable to change the zooming range, having attachment conversion lenses to change the focal length of the image input optical system.

Claim 13 (new) ; A 3D image input method whose right and left image input optical systems are organized by fixed focus input image optical systems of the electronic zoom image input method claimed in claim 7, or claim 8, or claim 9, or claim 10.

## Details of claim amendments

Claims 1-6 (canceled)

Claim 7 (new claim amended from claim 1)

An electronic zoom image input method that enables zooming without degrading the resolution, by including the fixed focus input image optical system having a function of compressing the input image more largely as it moves to the circumferential part [of the input image], the image input device providing preferably uniform pixel density [pixel], and the zoom image converting and correcting system.

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Claim 8 (newly settled claim relating to claim 1)

An electronic zoom image input method that enables zooming without degrading the resolution, by including the fixed focus input image optical system having a function of compressing the circumferential part of the input image in logarithmic function, [the image input device providing preferably uniform density pixel], and the zoom image converting and correcting system.

Claim 9 (new claim amended from claim 3)

An electronic zoom image input method claimed in claim 7, [claim 1, or claim 2] that has the optical system where the compression of the circumferential part of the input image is limited to the vertical and horizontal direction.

Claim 10 (new claim amended from claim 4)

An electronic zoom image input method claimed in claim 7, [claim 1, or claim 2,] that has a image input device with a rectangular input image plane, and an optical system with the function of compressing the circumferential part of the input image to all direction, and the neighboring part of the vertical and horizontal axes of the input image.

Claim 11 (new claim amended from claim 2)

An electronic zoom image input method claimed in claim 7, [Claim 1,] or claim 9, or claim 10, where the optical system that compresses the circumferential part of the input image is included as the attachment optical system.

Claim 12 (new claim amended from claim 5)

An electronic zoom image input method claimed in claim 7, or claim 9, or claim 10, [claim 1,or claim2, or claim 3, or claim 4,] that is capable to change the zooming range, having attachment conversion lenses [an attachment optical system] to change the focal length of the image input optical system.

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Claim 13 (new claim amended from claim 6)

A 3D image input method whose right and left image input optical systems are organized by fixed focus input image optical systems of the electronic zoom image input method claimed in claim 7, or claim 9, or claim 10 [any from claim 1, or claim3 or claim4 to claim 5].

Application Number: 09/331,008
Title: Electronic zoom image input method
Inventor: Eriko Shimizu
Art Unit: 2615



Corrected AMENDED ABSTRACT (clean version)

## Abstract

An electronic zoom image input method that enables zooming without declining the resolution by receiving an input image transmitted through a fixed focal distance optical system having a function of compressing the circumferential part of the input image by means of a photo detector with a uniform pixel density and subjecting the received image to image correction and conversion to obtain an output image. Three dimensional image input system is realized by preparing each image input system of both left and right view with this electronic zoom image input method.

Application Number: 09/331,008
Title: Electronic zoom image input method
Inventor: Eriko Shimizu
Art Unit: 2615



Details of corrected AMENDED ABSTRACT (marked up version)

## Abstract

An electronic zoom image input method that enables zooming without declining the resolution by receiving an input image transmitted through a fixed focal distance optical system having a function of compressing the circumferential part of the input image by means of a photo detector with a uniform pixel density and subjecting the received image to image correction and conversion to obtain an output image. Three dimensional image input system is realized by preparing each image input system of both left and right view with this electronic zoom image input method.

[It is necessary for zooming to use a conventional optical zoom lens that essentially has a complex and large construction. Instead, by using a simple fixed focal distance lens, a small, simple, all-electronic zoom image input system is realized.]

[Further, three-dimensional zooming, which conventionally requires precise interlock of two zoom lenses, can be realized with a very simple construction without using these complicated zoom lenses.]

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